

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A data transmission system comprising:

a transmission line ~~for transmitting~~ operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle, and asynchronous data to be processed at an arbitrary timing;

a plurality of plural-source devices for transmitting ~~operable to transmit~~ the isochronous data to ~~the said~~ transmission line; and

at least one sink device ~~for receiving~~ operable to receive a plurality of plural pieces of the isochronous data which have been transmitted to said ~~the~~ transmission line; wherein:

a specific device which is one of ~~the said~~ sink device and said plurality of the plural-source devices is operable to transmit, to said transmission line, transmits reference signal information for reproducing a predetermined reference signal as a reference for a processing timing of the isochronous data; ~~to the transmission line, and~~

said plurality of the plural-source devices other than said the specific device are operable to receive the reference signal information which has been transmitted to said the transmission line, to obtain the predetermined reference signal, and to output the isochronous data which are synchronized with the reference signal; and

said sink device is operable to respectively receive the isochronous data from said plurality of source devices in a timing that is synchronous with the reference signal, and to output the plurality of pieces of received isochronous data to a data processing device which is not connected to said transmission line in a timing that is synchronous with the reference signal.

Claim 2 (Currently Amended) The data transmission system of claim 1, wherein:

the data transmission on ~~the said~~ transmission line is repeatedly performed for each transmission frame as a unit of transmission data;

the transmission frame has a frame header which contains information indicating the head of each transmission frame and an isochronous data slot which contains the isochronous data; and

~~the said~~ specific device ~~transmits~~ is operable to transmit the reference signal information ~~with making by including the reference signal information to be included in the a special~~ frame header.

Claim 3 (Currently Amended) The data transmission system of claim 2, wherein ~~the said~~ specific device is operable to periodically transmit the special frame header which includes the reference signal information.

Claim 4 (Currently Amended) A data transmission system comprising:

a transmission line operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle, and asynchronous data to be processed at an arbitrary timing;

a plurality of source devices operable to transmit the isochronous data to said transmission line; and

at least one sink device operable to receive a plurality of pieces of the isochronous data which have been transmitted to said transmission line; wherein:

a specific device which is one of said sink device and said plurality of source devices is operable to transmit, to said transmission line, reference signal information for reproducing a predetermined reference signal as a reference for a processing timing of the isochronous data;

said plurality of source devices other than said specific device are operable to receive the reference signal information which has been transmitted to said transmission line, to obtain the predetermined reference signal, and to output the isochronous data which are synchronized with the reference signal;

~~The data transmission system of claim 1 wherein the data transmission on the said~~ transmission line is performed for each transmission frame as a unit of transmission data;

~~the each~~ transmission frame ~~has includes~~ a frame header which contains information indicating the head of each transmission frame, respectively, an isochronous data slot which contains the isochronous data, and an asynchronous data slot which contains the asynchronous data;

~~the said sink device performs~~ is operable to perform a processing of transmitting/receiving the asynchronous data; in addition to the processing of receiving the isochronous data;

~~the said plurality of source devices device performs~~ are operable to perform a processing of transmitting/receiving the asynchronous data; in addition to the processing of transmitting the isochronous data; and

~~the said specific device stores~~ is operable to store the reference signal information in at least one of the isochronous data slot or and asynchronous data slot and ~~transmits to~~ transmit at least one of the isochronous data slot or and asynchronous data slot.

Claim 5 (Currently Amended) A data transmission system comprising:

a transmission line operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle, and asynchronous data to be processed at an arbitrary timing;

a plurality of source devices operable to transmit the isochronous data to said transmission line; and

at least one sink device operable to receive a plurality of pieces of the isochronous data which have been transmitted to said transmission line; wherein:

a specific device which is one of said sink device and said plurality of source devices is operable to transmit, to said transmission line, reference signal information for reproducing a predetermined reference signal as a reference for a processing timing of the isochronous data;

said plurality of source devices other than said specific device are operable to receive the reference signal information which has been transmitted to said transmission line, to obtain the predetermined reference signal, and to output the isochronous data which are synchronized with the reference signal;

~~The data transmission system of claim 1 wherein the said specific device transmits~~ is operable to transmit, to said transmission line, a transmission/receipt designation packet which contains information designating a source device as a transmission source of the isochronous data and designating a sink device as a transmission destination of the isochronous data; ~~to the transmission line; and~~

said specific device is operable to transmit a specific transmission/receipt designation packet which is transmitted from the specific device includes the reference signal information.

Claim 6 (Currently Amended) The data transmission system of claim 5, wherein ~~the~~ said specific device is operable to periodically transmits-transmit the specific transmission/receipt designation packet including the reference signal information.

Claim 7 (Currently Amended) A data transmission system comprising:

a transmission line operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle, and asynchronous data to be processed at an arbitrary timing;

a plurality of source devices operable to transmit the isochronous data to said transmission line; and

at least one sink device operable to receive a plurality of pieces of the isochronous data which have been transmitted to said transmission line; wherein:

a specific device which is one of said sink device and said plurality of source devices is operable to transmit, to said transmission line, reference signal information for reproducing a predetermined reference signal as a reference for a processing timing of the isochronous data;

said plurality of source devices other than said specific device are operable to receive the reference signal information which has been transmitted to said transmission line, to obtain the predetermined reference signal, and to output the isochronous data which are synchronized with the reference signal;

~~The data transmission system of claim 1 wherein the~~ said sink device and the said plurality of source device perform devices are operable to perform a processing of transmitting/receiving a data packet which contains at least one of the isochronous data ~~or~~ and asynchronous data; and

~~the said specific device transmits~~ is operable to transmit, to said transmission line, the transmission/receipt designation packet which contains information designating ~~the~~ said sink device as a transmission source of the isochronous data, the said sink device as

a transmission destination of the isochronous data, and ~~the~~ at least one of said sink device ~~or and one of said plurality of source device devices~~ as a transmission source and transmission destination of the asynchronous data, ~~to the transmission line, and to~~ transmit transmits the reference signal information ~~with making by including the~~ reference signal information ~~included in~~ at least one of the isochronous data or and asynchronous data.

Claim 8 (Currently Amended) A data transmission system comprising:

a transmission line operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle, and asynchronous data to be processed at an arbitrary timing;

a plurality of source devices operable to transmit the isochronous data to said transmission line; and

at least one sink device operable to receive a plurality of pieces of the isochronous data which have been transmitted to said transmission line; wherein:

a specific device which is one of said sink device and said plurality of source devices is operable to transmit, to said transmission line, reference signal information for reproducing a predetermined reference signal as a reference for a processing timing of the isochronous data;

said plurality of source devices other than said specific device are operable to receive the reference signal information which has been transmitted to said transmission line, to obtain the predetermined reference signal, and to output the isochronous data which are synchronized with the reference signal;

~~The data transmission system of claim 1 wherein the~~ said sink device and the said plurality of source device perform devices are operable to perform a processing of transmitting/receiving a data packet which contains at least one of the isochronous data or and the asynchronous data;

~~the data transmission on the said~~ transmission line repeatedly performs a unit transmission processing for transmitting data in a fixed time period;

~~the said plurality of source devices and said sink devices device for transmitting~~ are operable to transmit the data packet in each transmission cycle as the period of the

unit transmission processing perform arbitration for obtaining a transmission right to transmit the data packet, and to transmit the data packet between a transmission source device which obtains the transmission right of the data packet by the arbitration and a transmission destination device corresponding to the transmission source device; and

~~the said~~ specific device ~~transmits~~ is operable to transmit a cycle start packet which indicates a start timing of the transmission cycle as the period of the unit transmission processing ~~every for each~~ for each fixed time period, and ~~transmits to transmit~~ the reference signal information to ~~the said~~ transmission line by including with making the reference signal information included in at least one of the isochronous data or and asynchronous data.

Claim 9 (Currently Amended) A data transmission system comprising:

a transmission line operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle, and asynchronous data to be processed at an arbitrary timing;

a plurality of source devices operable to transmit the isochronous data to said transmission line; and

at least one sink device operable to receive a plurality of pieces of the isochronous data which have been transmitted to said transmission line; wherein:

a specific device which is one of said sink device and said plurality of source devices is operable to transmit, to said transmission line, reference signal information for reproducing a predetermined reference signal as a reference for a processing timing of the isochronous data;

said plurality of source devices other than said specific device are operable to receive the reference signal information which has been transmitted to said transmission line, to obtain the predetermined reference signal, and to output the isochronous data which are synchronized with the reference signal;

~~The data transmission system of claim 1 wherein plural~~ a plurality of individual transmission systems are formed, each individual transmission system including at least one of said plurality of source device-devices and at least one of said sink device;

one specific device from among the plural at least one source device and said at least one sink device devices-constituting each of the individual transmission systems

~~transmits~~ is operable to transmit the reference signal information to ~~the other device other~~
than said specific device in the individual transmission system including ~~the said specific~~
device; and

the device other than ~~the said~~ specific device in each of the individual
transmission systems ~~receives~~ is operable to receive the reference signal information
transmitted from ~~the said~~ specific device, and ~~reproduces to reproduce~~ a reference signal
which is inherent to each of the individual transmission systems.

Claim 10 (Currently Amended) A data transmission system comprising:

a transmission line operable to transmit isochronous data to be processed at a
timing in synchronization with a reference signal having a fixed cycle, and asynchronous
data to be processed at an arbitrary timing;

a plurality of source devices operable to transmit the isochronous data to said
transmission line; and

at least one sink device operable to receive a plurality of pieces of the isochronous
data which have been transmitted to said transmission line; wherein:

a specific device which is one of said sink device and said plurality of source
devices is operable to transmit, to said transmission line, reference signal information for
reproducing a predetermined reference signal as a reference for a processing timing of the
isochronous data;

said plurality of source devices other than said specific device are operable to
receive the reference signal information which has been transmitted to said transmission
line, to obtain the predetermined reference signal, and to output the isochronous data
which are synchronized with the reference signal;

~~The data transmission system of claim 1 wherein the said~~ sink device comprises a
phase detector ~~for detecting which is operable to detect~~ a phase shift amount of the
received ~~plural~~ plurality of pieces of isochronous data, and ~~transmits said sink device is~~
operable to transmit phase difference information which indicates the phase shift amount
detected by the said phase detector; and

at least one of ~~the plural~~ said plurality of source devices ~~modifies~~ is operable to
modify a timing of reproducing the reference signal from the reference signal information

~~based on the basis of~~ the phase difference information which is transmitted from ~~the said~~ sink device so as to reduce the phase shift amount in ~~the said~~ sink device.

Claim 11 (Currently Amended) A data transmission system comprising:

a source device ~~for transmitting~~ operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle;

a sink device ~~for receiving~~ operable to receive the isochronous data which have been transmitted from ~~the said~~ source device; and

first and second transmission lines ~~having which have~~ different data transmission directions; and which connect ~~the said~~ source device and ~~the said~~ sink device in a one-to-one relationship; wherein:

said first transmission line is a low-speed transmission line having a low data transmission rate, and is operable to transmit data from said sink device to said source device,

said second transmission line is a high-speed transmission line having a data transmission rate that is higher than the transmission rate of said first transmission line, and is operable to transmit data from said source device to said sink device;

~~the said~~ sink device ~~performs-is~~ operable to perform an information transmission processing of transmitting, to said source device via said first transmission line, reference signal information for reproducing a predetermined reference signal as a reference of a processing timing of the isochronous data; ~~to the source device via the first transmission line,~~

~~the said~~ source device ~~performs-is~~ operable to perform a signal reproduction processing of receiving the reference signal information from ~~the said~~ sink device and reproducing the predetermined reference signal from the received reference signal information, and a data transmission processing of transmitting the isochronous data to ~~the said~~ sink device via ~~the said~~ second transmission line in synchronization with the reproduced predetermined reference signal; and

a transmission speed of the isochronous data on ~~the said~~ second transmission line is higher than a transmission speed of the reference signal information on ~~the said~~ first transmission line.

Claim 12 (Currently Amended) The data transmission system of claim 11, wherein:

~~the said~~ sink device and ~~the said~~ source device ~~perform~~ are operable to perform a processing of transmitting/receiving asynchronous data to be processed at an arbitrary timing;

the data transmission on each of ~~the said first and second~~ transmission lines is performed for each transmission frame as a unit of transmission data,

data transmission from ~~the said~~ sink device to ~~the said~~ source device is performed in a unit of a first transmission frame, which has a frame header indicating the head of each transmission frame, and an asynchronous data slot containing the asynchronous data to be processed at an arbitrary timing;

data transmission from ~~the said~~ source device to ~~the said~~ sink device is performed in a unit of a second transmission frame which has the frame header, an isochronous data slot containing the isochronous data, and the asynchronous data slot;

~~the said~~ sink device ~~transmits~~ is operable to transmit the reference signal information by including ~~with making the~~ reference signal information ~~included~~ in the frame header of the first transmission frame.

Claim 13 (Currently Amended) The data transmission system of claim 12, wherein ~~the said~~ sink device ~~transmits~~ is operable to transmit the frame header including the processing timing information in a fixed cycle.

Claim 14 (Currently Amended) The data transmission system of claim 11, wherein:

~~the said~~ sink device and ~~the said~~ source device perform a processing of transmitting/receiving asynchronous data to be processed at an arbitrary timing;

the data transmission on each of the transmission lines is performed for each transmission frame as a unit of transmission data,

data transmission from ~~the said~~ sink device to ~~the said~~ source device is performed in a unit of a first transmission frame which has a frame header indicating the head of each transmission frame and an asynchronous data slot containing the asynchronous data to be processed at an arbitrary timing;

data transmission from ~~the said~~ source device to ~~the said~~ sink device is performed in a unit of a second transmission frame which has the frame header and an isochronous data slot containing the isochronous data and the asynchronous data slot; and

~~the said~~ sink device ~~transmits-is operable to transmit~~ the reference signal information ~~by including with making~~ the reference signal information ~~included~~ in the asynchronous data.

Claim 15 (Currently Amended) The data transmission system of claim 11, wherein:

~~the said~~ sink device ~~stores-is operable to store, in a transmission/receipt designation packet,~~ information which designates a device as a transmission source of the isochronous data and a device as a transmission destination of the isochronous data, ~~in a transmission/receipt designation packet,~~ and ~~transmits to transmit~~ the transmission/receipt designation packet to ~~the said~~ first transmission line; and

a specific transmission/receipt designation packet which is transmitted from ~~the said~~ sink device includes the reference signal information.

Claim 16 (Currently Amended) The data transmission system of claim 15, wherein ~~the said~~ sink device ~~is operable to periodically transmits-transmit~~ the specific transmission/receipt designation packet including the reference signal information.

Claim 17 (Currently Amended) The data transmission system of claim 11, wherein:

~~the said~~ sink device ~~performs-is operable to perform~~ a processing of transmitting/receiving asynchronous data to be processed at an arbitrary timing, ~~as well as performs to perform~~ a processing of storing, in a transmission/receipt designation packet to be transmitted to said first transmission line, information which designates a device as a transmission source of at least one of the isochronous data ~~or and the~~ asynchronous data and a device as a transmission destination of at least one of the isochronous data ~~or and the~~ asynchronous data, ~~in a transmission/receipt designation packet to be transmitted to the first transmission line,~~ and ~~storing to store~~ the reference signal information in a required asynchronous data packet from among asynchronous

data packets including the asynchronous data to be transmitted to ~~the~~ said first transmission line; and

~~the said~~ source device ~~performs~~ is operable to perform a processing of transmitting/receiving the asynchronous data to be processed at an arbitrary timing as ~~well as transmits in addition to transmitting~~ an isochronous data packet which contains the isochronous data to ~~the~~ said second transmission line.

Claim 18 (Currently Amended) The data transmission system of claim 1, wherein ~~the~~ at least one of said first and second transmission lines is composed of an optical fiber.

Claim 19 (Currently Amended) The data transmission system of claim 1, wherein ~~the said~~ sink device and ~~the said plurality of source device devices~~ are operable to transmit/receive data as an optical signal; and

~~the said~~ transmission line comprises:

an optical star coupler having ~~plural~~ a plurality of input terminals and ~~plural~~ a plurality of output terminals, said optical star coupler being operable to output and outputting the optical signal which has been supplied to any one of the said plurality of input terminals from all of ~~the said plurality of~~ output terminals;

output side optical fibers ~~for connecting~~ operable to connect output terminals of ~~the said~~ sink device and ~~the said plurality of source device devices~~ and ~~the said plurality of~~ input terminals of ~~the said~~ optical star coupler; and

input side optical fibers ~~for connecting~~ operable to connect input terminals of ~~the said~~ sink device and ~~the said plurality of source device devices~~ and ~~the said plurality of~~ output terminals of ~~the said~~ optical star coupler.

Claim 20 (Currently Amended) The data transmission system of claim 11, wherein:

~~the said~~ sink device ~~transmits~~ is operable to transmit output data as an electric signal and ~~receives to receive~~ input data as an optical signal;

~~the said~~ source device ~~transmits~~ is operable to transmit output data as an optical signal and ~~receives to receive~~ input data as an electric signal;

~~the said~~ first transmission line for transmitting data from ~~the said~~ sink device to ~~the said~~ source device is composed of a conductor which propagates the electric signal; and

~~the said~~ second transmission line for transmitting data from ~~the said~~ source device to ~~the said~~ sink device is composed of an optical fiber which propagates the optical signal.

Claim 21 (Currently Amended) A data transmission system comprising:

a transmission line operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle, and asynchronous data to be processed at an arbitrary timing;

a plurality of source devices operable to transmit the isochronous data to said transmission line; and

at least one sink device operable to receive a plurality of pieces of the isochronous data which have been transmitted to said transmission line; wherein:

a specific device which is one of said sink device and said plurality of source devices is operable to transmit, to said transmission line, reference signal information for reproducing a predetermined reference signal as a reference for a processing timing of the isochronous data;

said plurality of source devices other than said specific device are operable to receive the reference signal information which has been transmitted to said transmission line, to obtain the predetermined reference signal, and to output the isochronous data which are synchronized with the reference signal;

~~The data transmission system of claim 1 wherein the~~ at least one of said plurality of source devices is respectively connected to at least one of a video data output unit which has an image-taking unit for performing operable to perform an image-taking processing, or and a video reproduction unit for performing operable to perform a reproduction processing for video data, and said at least one of said plurality of source device is operable to transmit transmits the video data output from the said video data output unit to the said transmission line as isochronous data; and

~~the said~~ sink device is connected to a video processing device ~~for operable to at least one of compose and record composing or recording plural~~ a plurality of pieces of video data, and receives said sink device is operable to receive the plural plurality of pieces of video data which have been transmitted from the plural said plurality of source devices as isochronous data so as to supply the plurality of pieces of video data to the said video processing device.

Claim 22 (Currently Amended) The data transmission system of claim 21, wherein ~~the at least one of said plurality of source device devices~~ comprises a video compression unit for compressing operable to compress the video data which have been supplied from the said video data output unit and outputting to output compressed video data, and transmits said at least one of said plurality of source devices is operable to transmit the compressed video data as the isochronous data.

Claim 23 (Currently Amended) A data transmission system comprising:

a transmission line operable to transmit isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle, and asynchronous data to be processed at an arbitrary timing;

a plurality of source devices operable to transmit the isochronous data to said transmission line; and

at least one sink device operable to receive a plurality of pieces of the isochronous data which have been transmitted to said transmission line; wherein:

a specific device which is one of said sink device and said plurality of source devices is operable to transmit, to said transmission line, reference signal information for reproducing a predetermined reference signal as a reference for a processing timing of the isochronous data;

said plurality of source devices other than said specific device are operable to receive the reference signal information which has been transmitted to said transmission line, to obtain the predetermined reference signal, and to output the isochronous data which are synchronized with the reference signal;

~~The data transmission system of claim 1 wherein the said sink device, the said plurality of source ~~device~~devices, and the said transmission line which connects these said sink device and said plurality of source devices are mounted on a motor vehicle;~~

~~the at least one of said plurality of source device ~~devices~~ is respectively connected to at least one of a motor-vehicle-mounted video data output unit having an image-taking unit ~~for performing which is operable to perform~~ an image-taking processing, ~~or and~~ a video reproduction unit ~~for performing which is operable to perform~~ a reproduction processing for video data, and said at least one of said plurality of source devices is operable to transmit ~~transmits~~ the video data which have been output from the said video data output unit as the isochronous data to the said transmission line;~~

~~the said sink device is connected to a motor-vehicle-mounted video processing device ~~for composing or recording plural~~ which is operable to at least one of compose and record a plurality of pieces of video data, and ~~receives~~ said sink device is operable to received the plural ~~plural~~ plurality of pieces of video data which have been transmitted from the plural said at least one of said plurality of source devices as the isochronous data so as to supply the data to the said video processing device;~~ and

~~the said sink device, the said at least one of said plurality of source device ~~devices~~, and the said transmission line constitute a network for transmitting the video data in the motor vehicle.~~

Claim 24 (Currently Amended) A data transmission method for transmitting isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle and asynchronous data to be processed ~~as~~ at an arbitrary timing, from ~~plural~~ a plurality of source devices as transmission sources of the isochronous data, to at least one sink device as a transmission destination of the isochronous data via a transmission line, said method comprising:

~~a data transmission step of~~ transmitting reference signal information for reproducing a predetermined reference signal as a reference of a processing timing of the isochronous data from a specific device from among the sink device and the ~~plural~~ plurality of source devices to the transmission line, and outputting isochronous data from

the plurality of source devices in a timing that is synchronous with the reproduced reference signal; and

~~a signal reproduction step of receiving the reference signal information which has been transmitted~~transmitted in said transmitting of the reference signal information to the transmission line, and reproducing the reference signal in the plural-plurality of source devices; and-

receiving, in the sink device, the isochronous data respectively outputted from the plurality of source devices in a timing that is synchronous with the reference signal, and outputting the plurality of pieces of received isochronous data to an external data processing device in a timing that is synchronous with the reference signal.

Claim 25 (Currently Amended) A data transmission system for transmitting isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle from a source device as a transmission source of the isochronous data to a sink device as a transmission destination of the isochronous data;

wherein said system comprises:

said source device and said sink device; and

first and second transmission lines which are operable to connect~~which is connected to the~~said source device and said sink device in a one-to-one relationship, said first transmission line being a low-speed transmission line having a low data transmission rate and being operable to transmit data from said sink device to said source device, and said second transmission line having a higher transmission rate than the transmission rate of said first transmission line and being operable to transmit data from said source device to said sink device;
wherein said system is operable to perform operations comprising:

~~an information transmission step of transmitting reference signal~~
information for reproducing a predetermined reference signal as a reference of a processing timing of the isochronous data; from ~~the said~~ sink device to ~~the said~~ source device via ~~a said~~ first transmission line;

~~a signal reproduction step of receiving the reference signal information from the said sink device, and reproducing the predetermined reference signal in the said source device; and~~

~~a data transmission step of transmitting the isochronous data to the said sink device via a said second transmission line in synchronization with the reproduced predetermined reference signal; and~~

wherein a transmission speed of the isochronous data on the said second transmission line is higher than a transmission speed of the reference signal information on the said first transmission line.

Claim 26 (Canceled)

Claim 27 (Currently Amended) A data transmission apparatus which is connected to a transmission line and which at least one of transmits and receives isochronous data to be processed at a timing in synchronization with a reference signal having a fixed cycle and asynchronous data to be processed at an arbitrary timing via the transmission line, said apparatus comprising:

a controller operable to control the transmission or receipt of the isochronous data and asynchronous data;

a reference signal generator operable to reproduce the reference signal based on reference signal information for reproducing a predetermined reference signal as a reference of a processing timing of the isochronous data which have been received as the asynchronous data; and

~~The data transmission apparatus of claim 26 comprising an image-taking unit for performing operable to perform an image-taking processing and outputting to output video data; wherein;~~

~~the said image-taking unit outputs is operable to output the video data in synchronization with the reference signal which has been reproduced by the said reference signal generator; and~~

~~the said controller transmits~~ is operable to transmit the video data which have been output from ~~the said~~ image-taking unit as the isochronous data to ~~the said~~ transmission line.

Claim 28 (Currently Amended) The data transmission apparatus of claim 27, further comprising:

a video compression unit ~~for compressing~~ operable to compress the video data outputted from the said image-taking unit and ~~outputting to output~~ compressed video data, wherein

~~the said controller transmits~~ is operable to transmit the compressed video data as the isochronous data.

Claim 29 (Currently Amended) The data transmission system of Claim 11, wherein ~~the said~~ transmission line is composed of an optical fiber.

Claim 30 (Currently Amended) The data transmission system of Claim 11, wherein:

~~the said~~ source device is connected to at least one of a video data output unit ~~which has having an image-taking unit for which is operable to perform performing an image-taking processing or and a video reproduction unit for performing which is operable to perform a reproduction processing for video data, and said source device is operable to transmit the video data output from said video data output unit to said transmission line as isochronous data; and~~

~~the said~~ sink device is connected to a video processing device ~~for composing or recording plural which is operable to at least one of compose and record a plurality of pieces of video data, and said sink device is operable to receive receives the plurality of pieces of video data which have been transmitted from the plural said source devices device as isochronous data so as to supply the data to the said video processing device.~~

Claim 31 (Currently Amended) The data transmission system of Claim 30, wherein ~~the said~~ source device comprises a video compression unit ~~for compressing which is operable to compress~~ the video data which have been supplied from the video data input unit and

~~outputting to output~~ compressed video data, and ~~transmits said~~ source device is operable to transmit the compressed video data as the isochronous data.

Claim 32 (Currently Amended) The data transmission system of Claim 11, wherein:

~~the said~~ sink device, ~~the said~~ source device, and ~~the said~~ transmission line which connects ~~these said sink device and said source device~~ devices are mounted on a motor vehicle;

~~the said~~ source device is connected to at least one of a motor-vehicle-mounted video data output unit having an image-taking unit ~~for performing which is operable to perform~~ an image-taking processing ~~or and~~ a video reproduction unit ~~for performing which is operable to perform~~ a reproduction processing for video data, and ~~transmits said source device is operable to transmit~~ the video data which have been output from ~~the said~~ video data output unit as the isochronous data to ~~the said~~ transmission line;

~~the said~~ sink device is connected to a motor-vehicle-mounted video processing device ~~for composing or recording plural which is operable to at least one compose or record a plurality of pieces of video data, and receives said sink device is operable to receive the plural plurality of pieces of video data which have been transmitted from the plural said source device devices as the isochronous data so as to supply the data to the said video processing device;~~ and

~~the said~~ sink device, ~~the said~~ source device, and ~~the said~~ transmission line constitute a network for transmitting the video data in the motor vehicle.